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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,676	08/05/2003	Ernst Hafner	TRW(AEC)6685	7166

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EXAMINER

SWENSON, BRIAN L

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,676

Applicant(s)

HAFNER ET AL.

Examiner

Brian Swenson

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/22/03.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings filed on 5 August 2003 are objected to as being informal for failing to contain a figure label and also under 37 CFR 1.84(l) for not uniformly thick lines, numbers and labels. Formal drawings will be required at the time of allowance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,157,372 issued to Blackburn et al. in view of U.S. Patent No. 5,775,451 issued to Hull et al.

Blackburn et al. teaches in Figures 1 through 7 and respective portions of the specification of a touch-sensitive control panel (44) with at least one alphanumeric input field (46) onto which at least one digit can be entered by tracing (Figure 3), a digit thus entered being transmitted as a setpoint value.

Blackburn et al. teaches that the touch-sensitive control panel is used to control a plurality of functions including controlling a power seat, power window, radio, heating, venting and air condition (Col. 2, lines 25-28). Blackburn et al. does not teach of controlling a cruise control.

Hull et al. teach in Figures 1-5 and respective portions of the specification of a method of operation a cruise control by a touch-operated keypad (see at least Col. 2, lines 4-5 and Figures 1, 2 and 4) mounted on a steering wheel gearshift lever (see Col. 4, lines 28 through 30). It would have been obvious to one having ordinary skill in the art at the time of invention for using a touch operated keypad to control a cruise control as taught by Hull et al.'s as a further function for the touch pad in the invention taught by Blackburn et al. One would be motivated to include a cruise control function for touch pad to provide the advantage of allowing the driver of the vehicle to easily activate the cruise control by the touch pad, as taught by Hull et al. (Col. 2, lines 65-66).

In regards to Claim 2 Blackburn et al. teach the setting function is activated by tapping (see at least Col. 4, line 65), a control field.

In regards to Claim 3 Blackburn et al. teach the control field (48) is contained within the alphanumeric input field (46; see at least Figure 1).

In regards to Claim 4 Blackburn et al. teach the setting function comprises a reading function that interprets symbols (Figure 5 step 146) that have been entered with a fingertip (Figures 8 and 9) by roughly tracing the digit onto the alphanumeric input field and that only accepts plausible alphanumeric symbols (Figure 5 returns to step 146 or step 160 if a non valid control signal is read).

In regards to Claim 5 Blackburn et al. teach of the operating means according to claim 1, wherein the alphanumeric input field is divided into a plurality of zones (48; Figure 1), whereby at least one digit can be entered into each of the zones (as shown by Figures 8 and 9 a digit can be entered into each zone).

In regards to Claim 6 Blackburn et al. does not show a plurality of control fields that can be haptically distinguished from one another. It would have been obvious to one having ordinary skill in the art at the time of invention to include a plurality of control fields that can be distinguished by touch from one another in the invention taught by Blackburn et al. and as modified by Hull et al. to allow the driver to control multiple functions without losing visual contact with the road.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,240,773 issued to Rita et al. shows a numerical input device in Figure 2 and 3 for an automobile.

U.S. Patent No. 4,797,538 issued to Schick teaches of placing a numerical input device on the steering wheel of an automobile.

U.S. Patent No. 6,799,488 issued to Snell, U.S. Patent No. 5,855,144 issued to Parada and U.S. Patent No. 6,225,578 issued to Kobayashi et al. all teach of switching devices for the steering wheels of automobiles.

U.S. Patent No. 5,764,218 issued to Della Bona et al. teach of a method for contacting a touch-sensitive cursor input device to generate button values.

U.S. Patent No. 5,825,351 issued to Tam teaches of a method for filtering noise in a touch pad.


U.S. Patent No. 6,418,362 issued to St. Pierre et al. teach of a steering wheel mounted cursor.

U.S. Patent No. 6,819,990 issued to Ichinose teaches of a touch panel input device for an automobile.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Swenson whose telephone number is (571) 272-6699. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 5/27/05
bls

Brian Swenson
Examiner
Art Unit 3618



CHRISTOPHER A. ELLIS
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